U.S. Application No. 10/568,688
Inventors: Giuseppe COVINO et al.
Attorney Docket No. 09952.0020-00000
Reply to Final Office Action of February 22, 2010

REMARKS

By this Reply, Applicants have amended claims 37, 53, 54, 62, 63, 64, 70,

and 72, and added new claim 76. No new matter has been added. Claims 37, 39-49,

52-54, 56-66, 69, 70, and 72-76 are present in the application and pending on the

merits.

For at least the reasons outlined in more detail below, Applicants respectfully

request reconsideration and withdrawal of the claim rejections included in the final

Office Action dated February 22, 2010.

I.   Objection to the Specification

Applicants respectfully traverse the objection to the specification. The final Office

Action asserts the specification "fail[s] to provide proper antecedent basis for . . . [a]

'computer-readable storage medium,'" as recited in claims 37, 39-49, 52, 53, 72,

and 73. Final Office Action at 4. Applicants respectfully disagree with the final Office

Action's assertion and request reconsideration of the objection.

The M.P.E.P. does not require word-for-word correspondence with the

specification of the application. M.P.E.P § 2163.02 ("The subject matter of the claim

need not be described literally (i.e., using the same terms or in haec verba) in order for

the disclosure to satisfy the description requirement.") Applicants note that a

"computer-readable storage medium" is described in the Specification. Specifically,

Applicants respectfully point to the originally-filed application at, for example, page 3,

lines 21-26, for the exemplary recitation of a "computer program product loadable in the

memory of at least one computer and comprising software code portions for performing

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the method of the invention." In at least this passage of the disclosure, support is

provided for "computer-readable storage medium."

For at least the reasons outlined above, Applicants respectfully submit that there

is sufficient antecedent basis in Applicants' written description to support the recitation

of a "computer-readable storage medium," as recited in claims 37, 39-49, 52, 53, 72,

and 73. Thus, Applicants respectfully request reconsideration and withdrawal of the

objection to the specification.

II.   Rejection Under 35 U.S.C. § 101

Claims 37, 39-49, 52, 53, 72, and 73 were rejected under 35 U.S.C. § 101 as

allegedly being directed to non-statutory subject matter. Final Office Action at 5. The

rejection statement asserts that a "'computer-readable storage medium' and a

'computer-readable medium' are not defined in the specification; therefore the scopes of

the amended claims cannot be determined as to whether they comprise transitory

media." Id. The rejection statement concludes that "the claimed terms comprise both

'non-transitory' and 'transitory' media." Id. at 5-6.

Applicants respectfully submit that the assertion is inaccurate. As outlined

above, Applicants' originally-filed application at, for example, page 3, lines 21-26,

provides an exemplary recitation of a "computer program product loadable in the

memory of at least one computer and comprising software code portions for performing

the method of the invention." Applicants respectfully submit that the computer program

product, as provided in the written description, is disclosed as non-transitory.

Moreover, the M.P.E.P. has defined "functional descriptive material" as material

which "consists of data structures and computer programs which impart functionality

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when employed as a computer component." M.P.E.P. § 2106.01 (internal citations

omitted). The M.P.E.P. continues, mandating that "[w]hen functional descriptive

material is recorded on some computer-readable medium, it becomes structurally and

functionally interrelated to the medium and will be statutory in most cases since use of

technology permits the function of the descriptive material to be realized." Id.

Applicants respectfully submit that claims 37, 39-49, 52, 53, 72, and 73 clearly

recite a "computer readable medium that imparts functionality when employed as a

computer component," and are therefore statutory according to M.P.E.P. § 2106.01.

For at least the reasons outlined above, Applicants respectfully submit that the

recitation of claims 37, 39-49, 52, 53, 72, and 73 fall within the categories of patentable

subject matter. Accordingly, Applicants respectfully request reconsideration and

withdrawal of the 35 U.S.C. § 101 rejection.

III.   Rejections Under 35 U.S.C. § 112

Claims 37, 39-49, 52, 53, 72, and 73 were rejected under 35 U.S.C. § 112, first

paragraph, as failing to comply with the written description requirement. Final Office

Action at 6. Specifically, the rejection statement asserts that neither of the "limitations

'resident on a computer-readable storage medium' and 'resident on a computer-

readable medium' . . . find support in the originally filed application." Id. Claims 37,

39-49, 52, 53, 72, and 73 were also rejected under 35 U.S.C. § 112, second paragraph,

as being indefinite for failing to particularly point out and distinctly claim the subject

matter regarded as the invention. Id. The rejection statement similarly asserts that the

"newly introduced terms such as 'computer-readable storage medium' and 'computer-

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readbale medium' [were] not defined in the specification; [and] therefore the scopes of the amended limitations cannot be determined." Id.

Applicants respectfully submit that the Section 112, first and second paragraph, rejections should be withdrawn. As outlined above, Applicants' originally-filed application recites a "*computer program product loadable in the memory of at least one computer* and comprising software code portions for performing the method of the invention." Specification at p. 3, ll. 21-26. (emphasis added). For reasons similar to those outlined above, Applicants submit that this disclosure would be understood by a person having ordinary still in that art as describing a non-transitory computer program product "resident on a computer-readable storage medium" and/or "resident on a computer-readable medium."

In light of at least that support in the originally-filed application, Applicants request reconsideration and withdrawal of the claim rejections under 35 U.S.C. §112, first and second paragraphs.

IV. Rejection Under 35 U.S.C. § 103

Claims 37-74 were rejected under 35 U.S.C. § 103(a) as unpatentable over U.S. Pat. App. Pub. No. 2002/0032769 (Barkai US), in view of EP 1150454 (Barkai EP). Final Office Action at 7. Of the claims listed in the rejection, claims 37, 54, and 72 are the only independent claims.

Applicants respectfully submit that Barkai US and Barkai EP, regardless of whether they are viewed individually or as a whole, fail to disclose or render obvious all of the subject matter recited in independent claims 37, 54, and 72, as amended, or claims 39-49, 52, 53, 56-66, 69, 70, 73, and 74, which depend from a corresponding

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one of independent claims 37, 54, and 72. Therefore, Applicants respectfully submit that the final Office Action fails to establish a *prima facie* case of obviousness with respect to the rejected claims.

A.   Amended Independent Claim 37

Amended independent claim 37 is directed to a system architecture including, *inter alia*, "wherein said layers are configured to modify respective [layer] functions in response to . . . instruction information, wherein said plurality of agents communicate information indicative of a status of said plurality of agents to said manager application, and wherein, in response to said status information, said manager application modifies the configuration of at least one among the base layer and the support layer."

The rejection statement acknowledges that <u>Barkai US</u> "does not expressly disclose said base layer comprising distributed process executors . . . , each process executor comprising at least one of a workflow engine, a rule engine, and a combination thereof." <u>Final Office Action</u> at 9. In an effort to remedy this acknowledged deficiency of <u>Barkai US</u>, the rejection statement asserts that <u>Barkai EP</u> discloses "a network management layer comprising distributed process executors . . . each comprising a workflow engine." <u>Id.</u> The rejection statement further asserts that "it would have been obvious . . . to combine the method disclosed by Barkai_US with the method disclosed by Barkai_EP regarding a network management layer comprising distributed process executors . . . each comprising a workflow engine." <u>Id.</u> at 10.

Applicants respectfully disagree with the rejection statement's assertions, and further, submit that contrary to these assertions, Applicants' amended independent claim 37 is not *prima facie* obvious based on <u>Barkai US</u> and <u>Barkai EP</u>.

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Barkai US provides no functionality that monitors the status of the device

components and in response to the status information, modifies the configuration of the

base layer and/or the support layer. Audit log 74 is the only element of Barkai US that

tracks data relating to network conditions or errors; "The audit log 74 is used to store

historical data relating to management tasks and network conditions, such as errors,

recovery procedures, reports, and history." Barkai US at [0061]. Similarly, Barkai US

states that "audit log 74 provides a general method for use throughout the system for

reporting software events." Id. at [0062]. The "software events" are "tagged and logged

by the audit log 74" and "stored in the local database by using the database

translator 68." Id. While Barkai US discloses the tracking and logging of network

conditions and software events, audit log 74 merely registers these events, storing them

in the management unit database to be accessed by a viewer application. Id. Neither

audit log 74 nor the management units use this information to create instructions that

alter the function or configuration of the base layer and/or the support layer.

Similarly, Barkai EP fails to disclose any functionality that monitors the status of

the device components and, in response to the status information, modifies the

configuration of the base layer and/or the support layer. Barkai EP discloses that the

"device components montor[] the state of the network at multiple network layers using

discrete message passing," (Barkai EP at [0032]), and similarly the "device components

identify network faults within the network at multiple network layers using discrete

message passing . . . ." Id. at [0033]. The device components of Barkai EP, therefore,

"monitor the state of the network" and "identify faults." Id. Barkai EP merely discloses

using this network state information to "support providing end-to-end network

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information and enforcing consistent policies and configurations." Id. at [0032].

Similarly, Barkai EP discloses using the network fault information "in support of end-to-end and root cause fault analysis." Id. at [0033]. In sum, while Barkai EP discloses the use of the network state and fault information to enforce and model network configurations and fault analysis, Barkai EP is silent with respect to the use of the network state and fault information to determine when to modify the configuration of the base layer and/or the support layer.

For at least these reasons, the prior art references fail to disclose or render obvious all of the subject matter recited in amended independent claim 37. Thus, Barkai US and Barkai EP, regardless of whether they are viewed individually or as a whole, fail to render amended independent claim 37 *prima facie* obvious. Therefore, Applicants respectfully request reconsideration and withdrawal of the Section 103(a) rejection of independent claim 37, and claims 39-49, 52, 53, and 73, which depend therefrom, based on Barkai US and Barkai EP.

B.   Amended Independent Claim 54

Amended independent claim 54 is directed to a method of managing a communication network, including, *inter alia*, "providing a manager application configured for distributing . . . instruction information from said database to at least one of said base layer and said support layer; providing information indicative of a status of said support layer to said manager application; and modifying the configuration of at least one among said base layer and said support layer in response to said status information." For reasons at least similar to those outlined above with respect to amended independent claim 37, Applicants' amended independent claim 54 is

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patentably distinguishable from Barkai US and Barkai EP. Therefore, Applicants respectfully request reconsideration and withdrawal of the Section 103(a) rejection of amended independent claim 54, and claims 56-66, 69, 70, and 74, which depend therefrom.

C.   Amended Independent Claim 72

Amended independent claim 72 is directed to a computer program product resident on a computer-readable medium for storing instructions for execution by a processor, the instructions performing a method of managing a communication network, the method including, *inter alia*, "receiving information indicative of a status of said support layer; and modifying at least one among said base layer and said support layer in response to said status information."

For reasons at least similar to those outlined above with respect to amended independent claim 37, Applicants' amended independent claim 72 is patentably distinguishable from Barkai US and Barkai EP. Therefore, Applicants respectfully request reconsideration and withdrawal of the Section 103(a) rejection of amended independent claim 72.

D.   Amended Claim 75

Applicants' amended claim 75 is directed to a system comprising, "a network including network equipment, and a management system architecture according to any one of claims 37, 39–49, 52, 53, and 73 for managing said network." For reasons at least similar to those outlined above with respect to amended independent claim 37, Applicants respectfully submit that amended claim 75 is patentably distinguishable from Barkai US and Barkai EP.

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V.   New Claim 76

New claim 76 is an independent claim directed to a network management system including, *inter alia*, "wherein said layers are configured to modify respective [layer] functions in response to . . . instruction information, wherein said plurality of agents communicate information indicative of a status of said plurality of agents to said manager application, and wherein, in response to said status information, said manager application modifies the configuration of at least one among the base layer and the support layer." For reasons at least similar to those outlined above with respect to amended independent claim 37, new independent claim 76 is patentably distinguishable from Barkai US and Barkai EP. Therefore, new independent claim 76 should be allowable.

VI.   Conclusion

For at least the reasons set forth above, independent claims 37, 54, 72, and 76 should be allowable. Dependent claims 39-49, 52, 53, 56-66, 69, 70, and 73-75 each depend from at least one of allowable independent claims 37 and 54. Therefore, each of those dependent claims should be allowable for at least the same reasons as the corresponding independent claims, as well as by virtue of their additional recitations of novel and non-obvious subject matter.

In view of the foregoing remarks, Applicants submit that the claims are neither anticipated nor rendered obvious in view of the references cited against the claims. Applicants, therefore, respectfully request reconsideration of this application, reconsideration and withdrawal of the claim rejections, and allowance of pending claims 37, 39-49, 52-54, 56-66, 69, 70, and 72-76.

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If the Examiner believes that a telephone conversation might advance prosecution of this application, the Examiner is cordially invited to call Applicants' undersigned attorney at (404) 653-6439.

Applicants respectfully submit that the final Office Action contains a number of assertions concerning the related art and the claims. Regardless of whether those assertions are addressed specifically herein, Applicants respectfully decline to automatically subscribe to them.

Please grant any extensions of time required to enter this response and charge any additional required fees to Deposit Account 06-0916.

Respectfully submitted,

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Dated: July 22, 2010   By: _J. Keesee_____

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